

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BRACKET ASSEMBLY
Job Number	: 27604		
Estimate Number	: 12454		
P.O. Number	: N/A	Part Number	: D3183042
This Issue	: 6/15/2006 S.O. No. : N/A	Drawing Number	: D3183 REV C1
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : MACHINED PARTS	Drawing Revision	: C1
Previous Run	: N/A	Material	: N/A
Written By	: <u>HJ 06.06.15</u>	Due Date	: 6/30/2006 Qty: 2 Um: Each
Checked & Approved By	: <u>HJ 06.06.15</u>		
Comment	: Est Rev: Pick: A 04.02.18 New issue KJ/DS		

## Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M174B2000X01500	17-4 SS Bar
-----	-----------------	-------------



Comment: Qty.: 0.4812 f(s)/Unit Total : 0.9624 f(s)  
Material: 17-4 SS Bar per AMS 5604/5643  
(M17-4-B1.500x02.000)  
Identify for D3183-043  
Batch: M 101422

J.F. 06/07/11

2.0	BAND SAW	BAND SAW
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**Comment:** BAND SAW  
Cut blanks: (1.500" x 2.000") 4.300" long

J.F: 06/07/11

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



**Comment:** HAAS CNC VERTICAL MACHINING #1

1-Machine D3183-2 as per Folio FA320 and Dwg D3183  
Identify as D3183-2

## 2-Deburr

3-Scribe batch number

ΣΔ 06.07.20


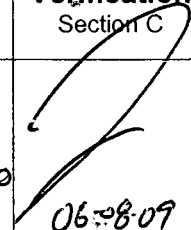
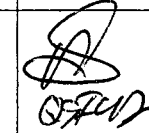
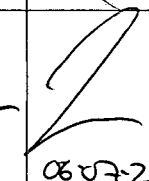
4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE

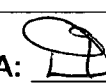


**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

SD 06.07.20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
060728	5.0	-part pulled out of jig while machining bearing spigot damaged		Scrap: destroy. Replace	SD 060720	 060809	 060720	 060720

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA:  Date: 06/09/15

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Date: Thursday, 6/15/2006 3:17:02 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 27604

Part Number: D3183042

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.G 06108109

6.0

D312121

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3121-21

Bolt B27851

7.0

D3183045

Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3183-045 Bearing Ass

B28622

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3183-041 as per Dwg D3183.

SB 06/09/15 (2)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

JG 06-15 (2)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

C L 06/09/15 (2)

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

R 06/09/15 (2)

Job Completion



C L 06/09/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

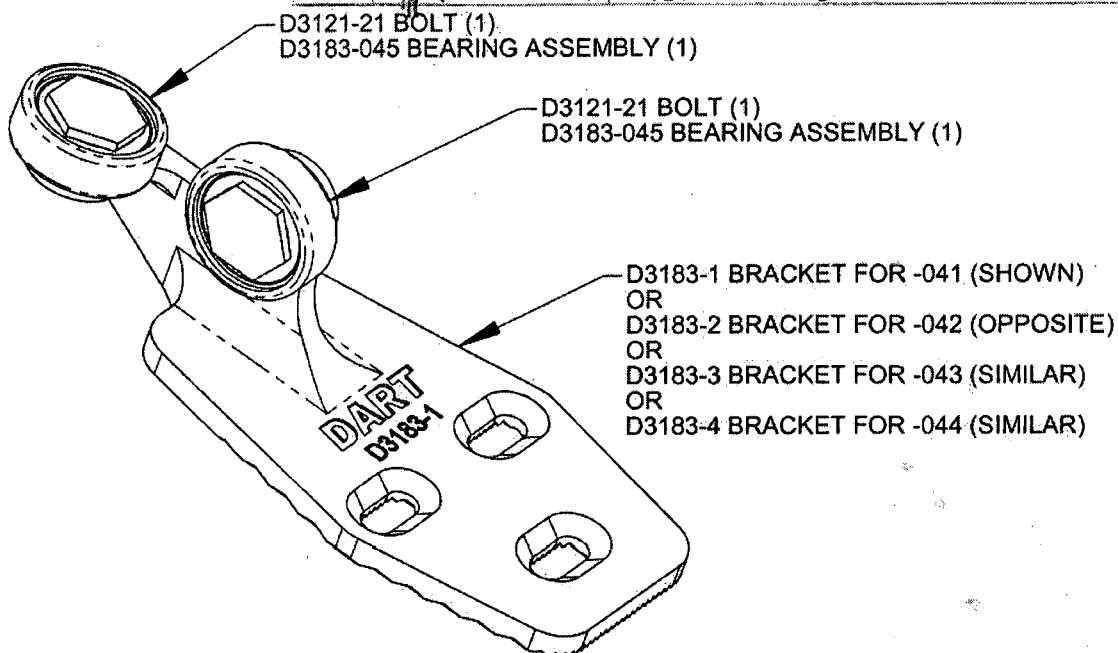
NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

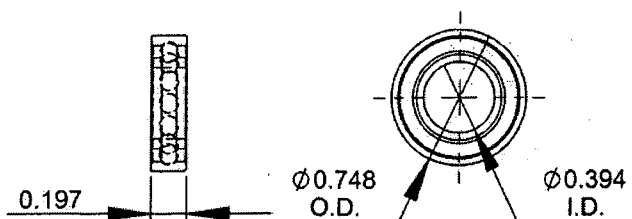


DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A.	03.01.24	NEW ISSUE	
B.	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C.	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
CI	04.11.09	0.830 WAS 0.850	

RELEASED  
04.03.01

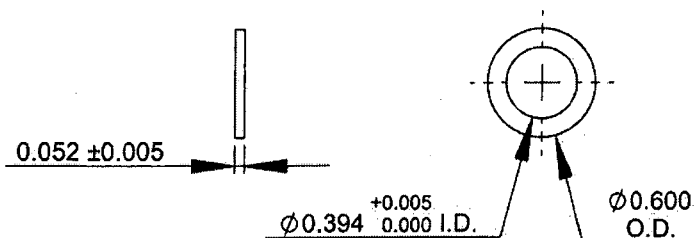


**D3183-041 BRACKET ASSEMBLY (SHOWN)**  
**D3183-042 BRACKET ASSEMBLY (OPPOSITE)**  
**D3183-043 BRACKET ASSEMBLY (SIMILAR)**  
**D3183-044 BRACKET ASSEMBLY (SIMILAR)**



**D3183-5 BEARING:**  
**SPECIFICATION CONTROL DRAWING**

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



**D3183-7 WASHER**

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI-018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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WORK ORDER  
NO. 27604

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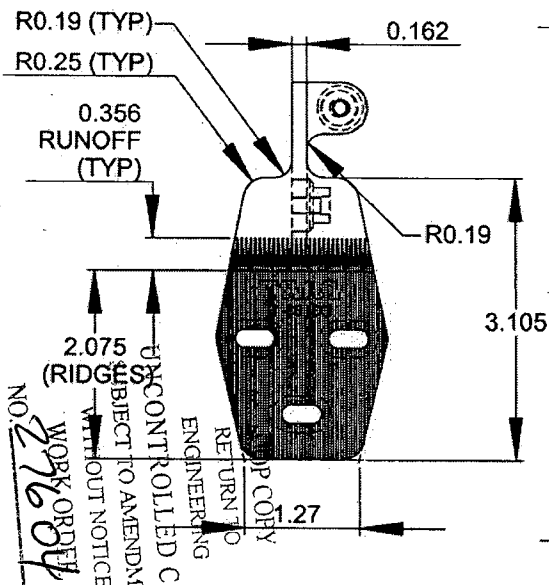
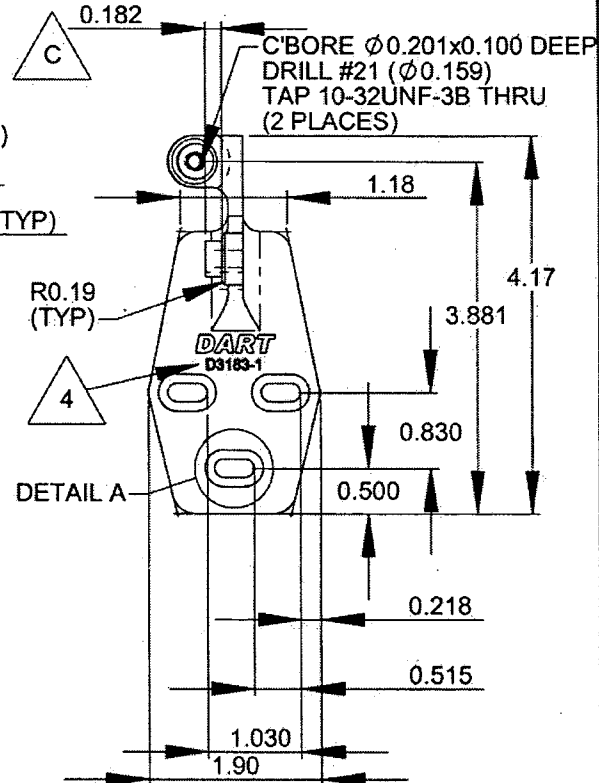
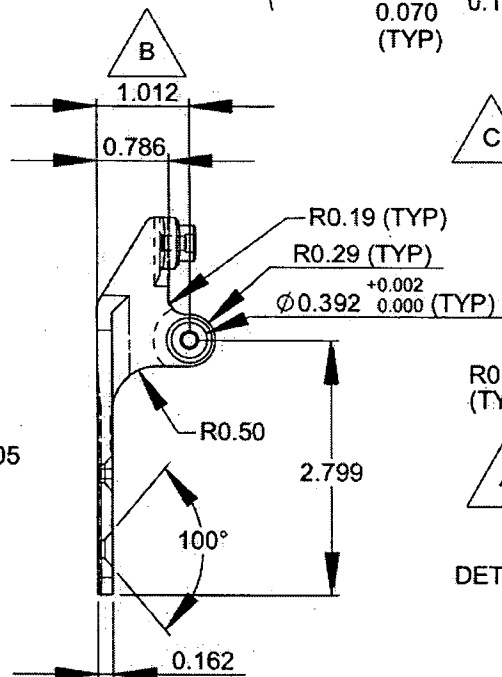
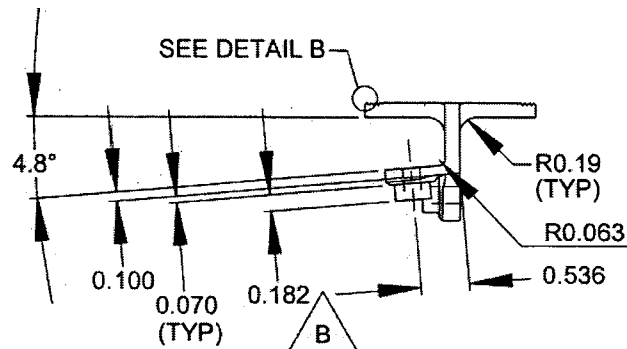
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CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. C
04.02.17	D3183	SHEET 2 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2

RELEASED  
04.03.01



D3183-1 BRACKET SHOWN  
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3  
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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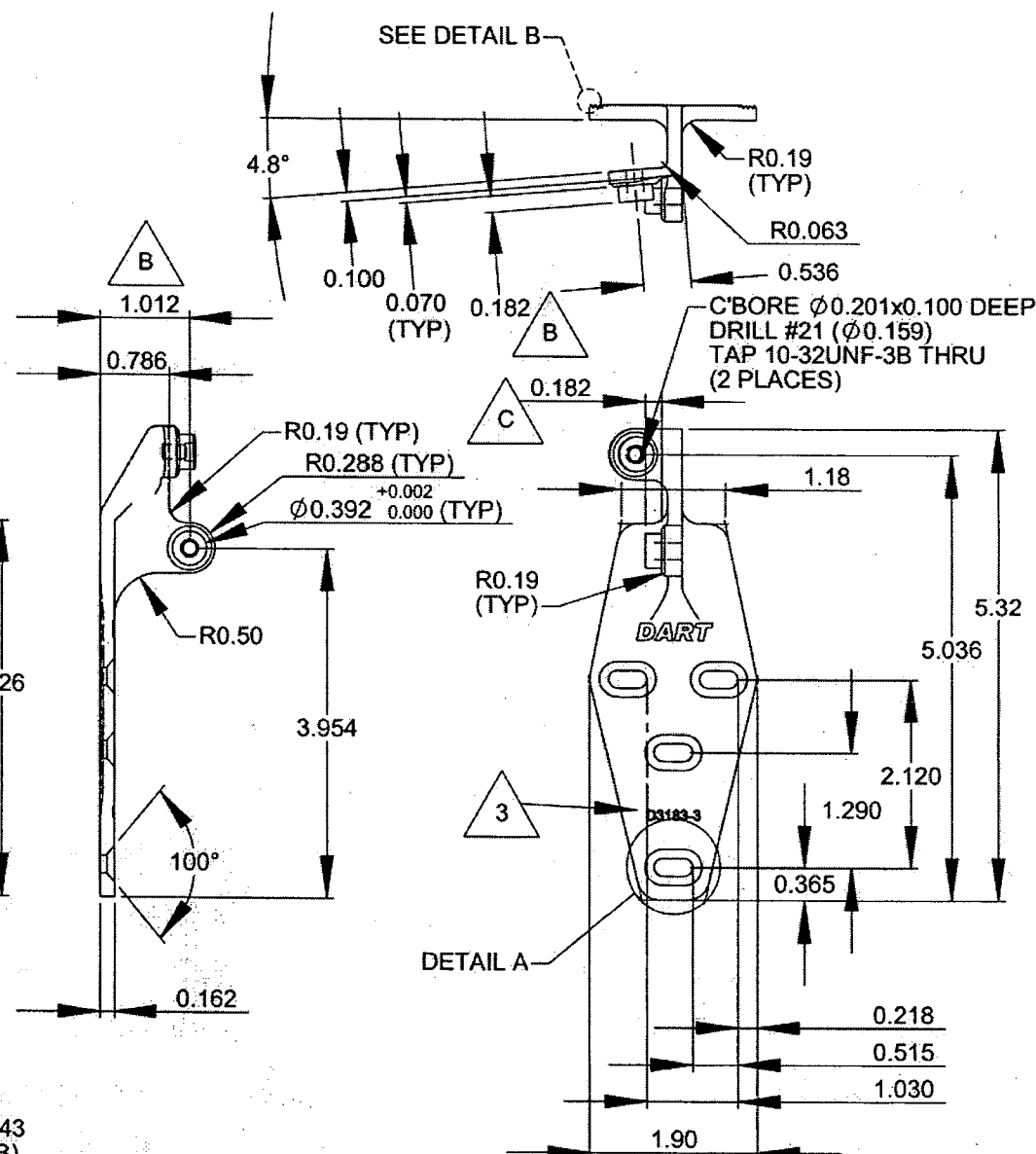
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WORK ORDER  
SUBJECT TO AMENDMENT  
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# DART

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DATE	DRAWING NO.	REV. C
04.02.17	D3183	SHEET 3 OF 4
TITLE	BRACKET ASSEMBLY	SCALE
		1:2



D3183-3 BRACKET SHOWN  
(REPLACES BELL P/N 412-030-304-105)  
D3183-4 BRACKET OPPOSITE  
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643  
(REF DART SPEC. M17-4-B)  
MIN ULTIMATE STRENGTH = 150 ksi  
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

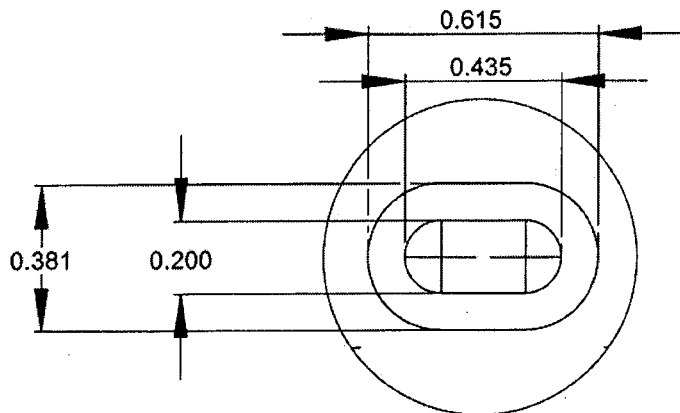
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24.03.01

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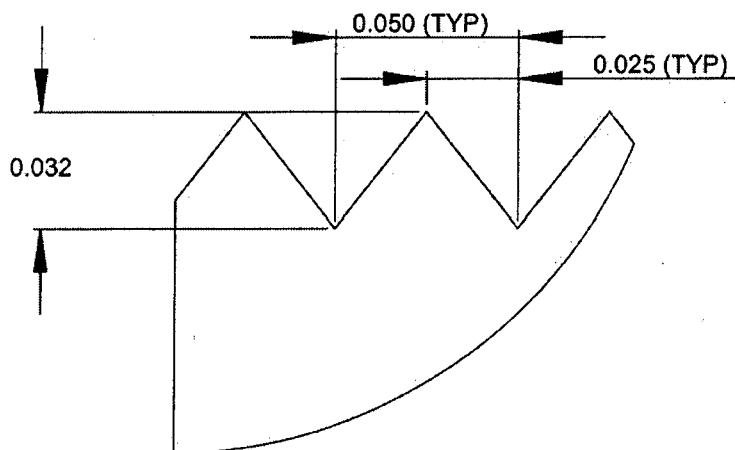


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CHECKED #	APPROVED #	DRAWING NO. <b>D3183</b>	REV. C SHEET 4 OF 4
DATE <b>04.02.17</b>		TITLE <b>BRACKET ASSEMBLY</b>	SCALE 1:1

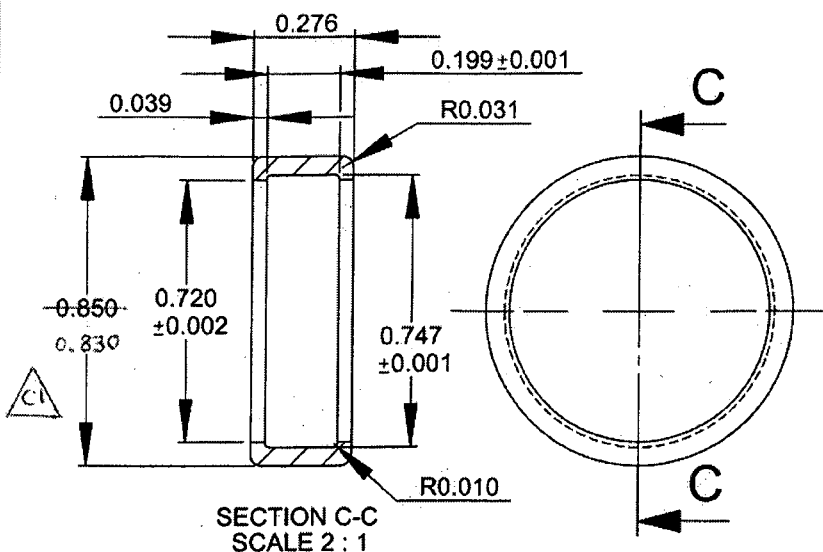


DETAIL A (2 : 1)

**RELEASED**  
04.03.01



DETAIL B (20 : 1)



**D3183-9 CAP**

- 1) MATERIAL: DELRIN ROD, Ø1.00  
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018  
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3183-045 BEARING ASSEMBLY**

- 1) ASSEMBLE D3183-5 BEARING AND  
D3183-9 CAP

ENGINEERING  
SUBJECT TO INQUIRY  
WITHOUT NOTICE  
WORK ORDER  
NO. **27604**

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Work Order: 12454  
 Part Number: D3183-2  
 Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☐ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.162		.166	/			
R.25		R.25	/			
3.105		3.107	/			
<del>3.105</del>						
2.075		2.075	/			
.786		.788	/			
.162		.162	/			
100°		100°	/			
2.799		2.802	/			
Ø.392	+ .002 - .000	Ø.392	/			
1.90	+ .030	1.890	/			
.218		.215	/			
.500	+ .01	.500	/			
<del>3.881</del>						
3.881		3.885	/			
4.17	+ .030	4.170	/			
Ø.201 x 100 deep	+ .010	Ø.201 x .163	/			
.182		.181	/			
.070		.068	/			
.100		.102	/			
4.8°		4.8°	/			

Inspected by: SD	Audited by:	Prototype Approval:
Date: 06.07.20	Date:	Date:

Revised by: KJ/RF	Approved:
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# FIRST ARTICLE INSPECTION CHECKLIST

☐ First Article ☐ Prototype

[illegible]

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Signature	<i>S.A.</i>													
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<table border="1"> <tr> <td>Revised by</td> <td>Approved</td> </tr> <tr> <td>KJ/RF</td> <td></td> </tr> </table>	Revised by	Approved	KJ/RF											
Revised by	Approved													
KJ/RF														